



Maryland
Department of
the Environment

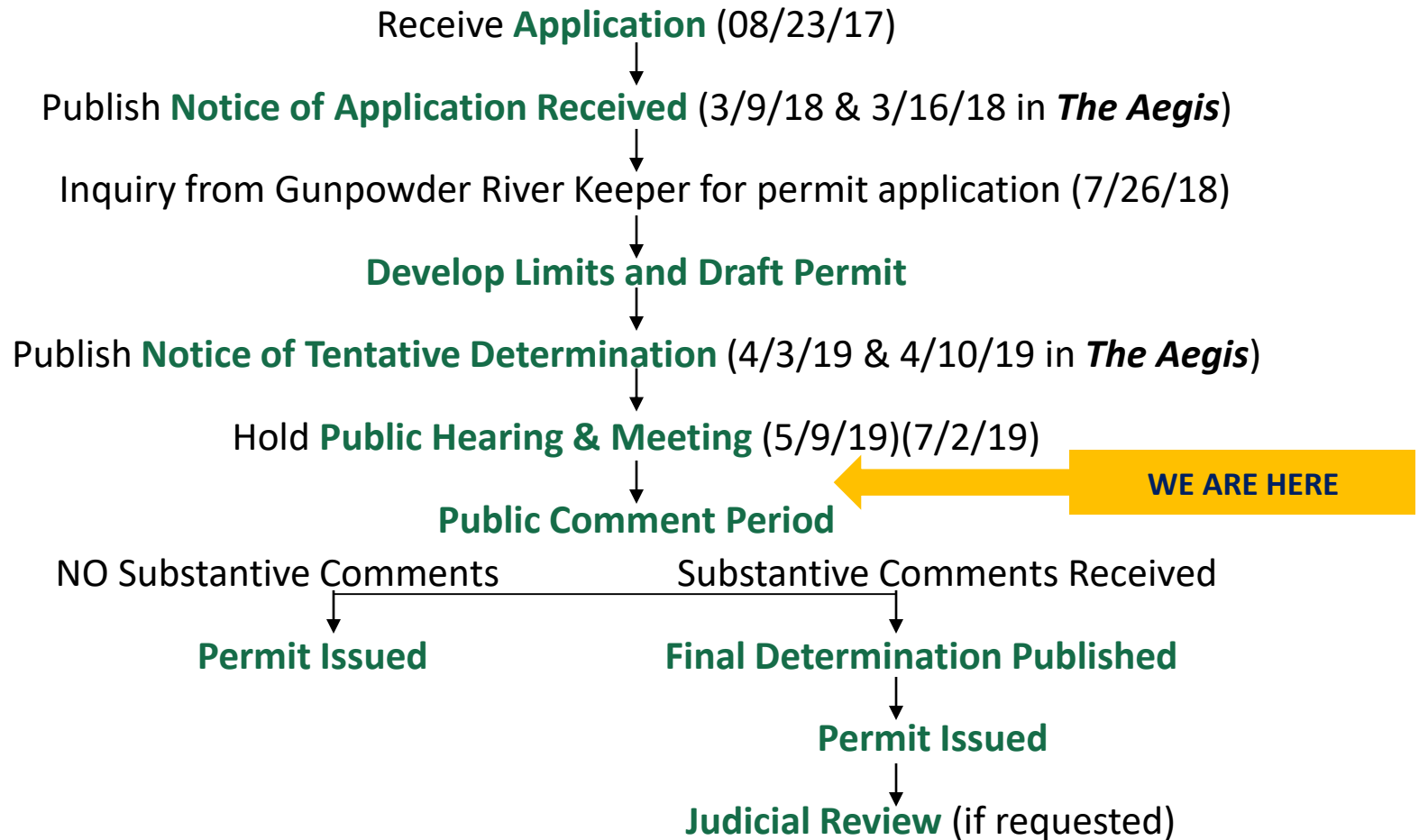
Overview

**Proposed Surface Water Discharge Permit
for
Mountain Christian Church WWTP
Application No. 18-DP-3850, NPDES No. MD0072001**

Tuesday, July 16, 2019



PROCESS MILESTONES





FACILITY INFORMATION

Proposed Permit to Authorize

Mountain Christian Church
1824 Mountain Road
Joppa, MD 21085

To Discharge from: Mountain Christian Church WWTP

Located at: 1824 Mountain Road
Joppa, Harford County, MD 21085

Through Outfall: 001A (Facility Effluent)

To: Indian Grave Run, a tributary of Little Gunpowder Falls



MAP OF DISCHARGE POINT





PROPOSED DISCHARGE IN PERSPECTIVE

The flow rate from this permit (2,400 gallons per day) will be equal to **1.7 gallons per minute**.

In comparison, a typical $\frac{1}{2}$ inch diameter garden hose attached to a faucet can produce a flow rate of **6 to 24 gallons per minute**.





DESIGNATED USE III WATER

The effluent receiving streams are designated as Use III Water to support:

1. Growth and propagation of trout.
2. Water contact recreation.





WATER QUALITY CRITERIA APPLIED

Parameter	Regulations
BOD₅	COMAR 26.08.02.03-3D(2), COMAR 26.08.04.04C(1), COMAR 26.08.01.01B(80), and 40 CFR§133.102.
TSS	COMAR 26.08.02.03-3D(5), COMAR 26.08.02.03-3A(5), COMAR 26.08.04.04C(1), COMAR 26.08.01.01B(80) and 40 CFR§133.102 - §133.105.
TKN	COMAR 26.08.02.03-3D(2).
Ammonia as N*	COMAR 26.08.02.03-2H & COMAR 26.08.02.03-2I and COMAR 26.08.02.05C, COMAR 26.08.02.05D.
Total N	The Chesapeake Bay TMDL
Total P	The Chesapeake Bay TMDL
E. Coli	COMAR 26.08.02.03-3D(1) and COMAR 26.08.02.03-3A(1).
TRC*	COMAR 26.08.02.03-3D(7).
pH	COMAR 26.08.02.03-3D(4) and COMAR 26.08.02.03-3A(4).
Dissolved Oxygen*	COMAR 26.08.02.03-3D(2).
Temperature*	COMAR 26.08.02.03-3D(3).
Flow	COMAR 26.08.04.02A(2). The discharge is consistent with the Harford County water and sewer master plan.

*Use III specific requirements



PROPOSED EFFLUENT LIMITATIONS

Effluent Characteristic	Effluent Limit
BOD₅	6 mg/L monthly avg. & 9 mg/L weekly avg. (5/1 to 10/31) 15 mg/L monthly avg. & 23 mg/L weekly avg. (11/1 to 4/30)
TSS	30 mg/L monthly avg. & 45 mg/L weekly avg.
TKN	2.4 mg/L monthly avg. & 3.6 mg/L weekly avg. (5/1 to 10/31)
Ammonia as N	0.71 mg/L monthly avg. & 2.14 mg/L daily avg. (5/1 to 10/31) 1.0 mg/L monthly avg. & 2.14 mg/L daily avg. (11/1 to 4/30)
Total N	5.0 mg/L annual average concentration
Total P	0.3 mg/L annual average concentration
E. Coli	126 MPN/100 mL monthly geometric mean value
TRC	The use of chlorine is prohibited.
pH	6.5 to 8.5
Dissolved Oxygen	7.0 mg/L at any time
Temperature	20°C (68°F) or ambient temperature, whichever is greater
Flow	2,400 gallons per day



PROPOSED MONITORING REQUIREMENTS

Effluent Characteristic	Sampling Frequency	Sampling Method
BOD₅	One per week	24-hour composite
TSS	One per week	24-hour composite
TKN	One per week	24-hour composite
Ammonia as N	One per week	24-hour composite
Total N	One per week	24-hour composite
Total P	One per week	24-hour composite
E. Coli	One per week	Grab
pH	One per day	Grab
Dissolved Oxygen	One per day	Grab
Temperature	One set per week	Immersion Stabilization
Flow	Continuous	Recorded



CONCLUSION

1. This is the most protective discharge permit (dissolved oxygen, nutrients and temperature...etc.) we have ever considered for a discharge this size.
2. The Department will continue to review all comments received before making the final determination.



CONTACT INFORMATION

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QUESTIONS?